This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (previously presented) A method for transmitting service data in telecommunication systems with wireless telecommunication based on a predefined radio interface protocol between telecommunication devices, comprising the steps of:

transmitting said service data in protocol data units predefined by said radio interface protocol;

transmitting a service data unit configured at least as a fragment in each protocol data unit independently of the size of said service data unit, which is configured at least as a fragment, in comparison with the size of a free part of said each protocol data unit which is in each case not yet occupied by service data;

specifying, in each case, a service data length, which differs from the value "zero", of a respective said service data unit configured at least as a fragment, by a first information item allocated to said protocol data unit;

specifying, in each case, an end of said respective service data unit by a second information item allocated to said protocol data unit;

specifying, in each case, a non-end of said respective service data unit by a third information item allocated to said protocol data unit;

specifying or allocating a fourth information item corresponding to the value "zero" of the service data length to said protocol data unit, together with said second information item in said protocol data unit when said transmission of service data is ended at least temporarily.

Claim 2. (previously presented) The method as claimed in Claim 1, further comprising the step of transmitting in a protected manner said service data.

Claim 3. (previously presented) The method as claimed in Claim 1, further comprising the step of arranging said first information item, said second information item and said third

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information item in front of said service data unit, which is at least configured as a fragment, in said respective protocol data unit.

Claim 4.   (previously presented) The method as claimed in Claim 1, wherein said second information item consists of the value "0" of a bit and said third information item consists of the value "1" of the bit.

Claim 5.   (previously presented) The method as claimed in claim 1, wherein said data in telecommunication system is voice or packet data in DECT systems.

Claim 6.   (previously presented) The method as claimed in claim 1, wherein said service data is ended at least temporarily within said protocol data unit.